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Remarks

Claims 13-42 are pending in this application.

Claim Rejection - 35 USC § 102

In the Office Action, claims 13-22, 24, 28, 31, and 33-42 are rejected as anticipated by U.S. Pre-Grant Publication No. 2003/0224239, hereafter "Carlstrom." This rejection is respectively traversed in view of the following comments.

Carlstrom fails to disclose each and every limitation of the claimed invention. Nowhere in Carlstrom is it disclosed or suggested that a pitch of a first flow field plate is less than the pitch of a second flow field plate. The "pitch" of a flow field plate is defined in the specification as "the cross sectional width of the channel plus the cross sectional width of an adjacent land." See paragraph [0005] of the specification in the present invention.

The Examiner alleges that the Applicants are changing their definition of the term "pitch." However, in both the arguments filed 8/16/05 and 12/19/05, the Examiner has been directed to sections of the specification for the definition the term "pitch." In the argument filed 8/16/05, Applicants were responding to the Examiner's incorrect definition of the term pitch presented in the Office Action dated July 6, 2005. At that time, Applicants believed that it was unnecessary to expound on the definition of the term "pitch" provided at page 9, paragraph [0029] as the cited prior art was clearly deficient in having a pitch (land width plus channel width) defined by a first flow field plate that is less than a pitch (land width plus channel width) defined by a second flow field plate. Applicants were apparently correct in this assertion as the Examiner drop the anticipatory rejections to Gurau et al., Suzuki et al., and Wilkinson et al. in the next Office Action dated October 7, 2005, and then provided the then newly cited reference to Carlstrom.

However, in view of the Examiner alleging that Carlstrom teaches that "the channels are designed to be varied in shape and pattern, where the channels can be different sizes, and cross sectional areas [sic] would therefore have varying land-to-land contact across the membrane with a pitch of one flow field plate being less than a pitch of another flow field plate in varying degrees and a thickness of the plate less than 1mm," it was obvious to the Applicants that the term "pitch" need to be expounded as the

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Examiner didn't understand context of the term as it had been clearly defined by the Applicants in the specification. Hence to make clear to the Examiner the meaning and context of the term "pitch," the Applicants pointed to paragraph [0005] of the specification. Words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (discussed below); *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004). Applicant have consistently pointed to the specification for the definition of the term "pitch," and have not wavered from that definition.

As Applicants have previously stated in their arguments filed 12/19/05, although channel shape and design vary between the embodiments disclosed by Carlstrom, the pitch does not vary between plates of each embodiment. To highlight this point, Applicants submitted Exhibit A (herein incorporated by reference) which shows FIGS. 5-7 of Carlstrom marked up to indicate that the pitch between the plates 502, 504 (FIG. 5), 602, 604 (FIG. 6), and 702, 704 (FIG. 7) of the illustrated embodiments are the same, and that even in the embodiment of Carlstrom, where only one of the plates 702 and 704 is provided with a ridge 706, 708 (see paragraph [0050]), such an embodiment still has the same pitch between the plates. The Examiner is correct that Applicants have merely used an arbitrary scale in the Exhibit. The scale could have been in microns, inches, or paper clips, as the scale is irrelevant to the point that Carlstrom teaches and discloses in all his illustrated embodiments that the pitch is the same between the plates.

As also pointed out in the arguments filed 12/19/05, nowhere in Carlstrom is it disclosed or suggested that a plate of one embodiment, for example, plate 505 (FIG. 5) can be paired up with the plate of another embodiment, for example, plate 608 (FIG. 6). However, even if one skilled was provided with such a suggested, such an embodiment would still not produce that claimed invention as Carlstrom is silent on the desire to vary the pitch between plates. In fact, none of the cited art provides such a desire. In view of the cited art, only impressive hindsight would provide such motivation to vary the pitch between plates.

Independent claim 13 recites, *inter alia*, the limitation of "a pitch defined by said first flow field plate is less than a pitch defined by said second flow field plate."

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Independent claim 42 recites, *inter alia*, the limitations of "said second channels define a cross sectional width approximately equal to a cross sectional width defined by said first channels, said second flow field plate defines a channel pitch substantially greater than a channel pitch defined by said first flow field plate." As Carlstrom fails to disclose or suggest such limitations, withdrawal of the anticipatory rejection to the above noted claims is respectfully requested.

Claim Rejection - 35 USC § 103

In the Office Action, claims 23, 25-27, 29, 30 and 32 are rejected as being unpatentable over Carlstrom in view of Suzuki et al. U.S. Pre-Grant Publication No. 2002/0004158, hereafter "Suzuki et al." This rejection is respectively traversed in view of the following comments.

The above noted claims depend from claim 13, which as pointed out above, Carlstrom fails to teach the limitation of "a pitch defined by said first flow field plate is less than a pitch defined by said second flow field plate." As pointed out in the arguments filed 8/16/05, Suzuki et al. also fail to disclose or suggest that a pitch of a cathode flow field plate is less than the pitch of an anode flow field plate. Therefore, as the combined teachings of Carlstrom and Suzuki et al. would fail to disclose or suggest the recited invention of independent claim 13, withdrawal of this rejection to dependent claims 23, 25-27, 29, 30 and 32 is respectfully requested.

Conclusion

In view of the above amendments and remarks, Applicants respectfully submit that the present application is in condition for allowance. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

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